

REMARKS

Claims 1 to 22, as amended, appear in this application for the Examiner's review and consideration. Claims 1 and 6 are withdrawn, as being directed to a non-elected species, and claims 17 to 18 are withdrawn, as being directed to a non-elected invention. The amendments are fully supported by the specification and claims as originally filed. In particular, support for the amendment of the preamble of the claims to change "Coating composition" to "A two-phase coating system" and of the recitation of the two separate phases is found on page 1, lines 21 to 32 of the present specification. Applicant respectfully submits that one of ordinary skill in the art, in light of the present specification, would understand that the originally claimed coating composition was a two-phase coating system. Therefore, there is no issue of new matter or of a submission of claims outside of the scope of the Response to the Restriction Requirement filed previously. In addition, the amendments to the independent claims add recitations that elaborate on the structure of the presently claimed invention, and, thus, do not affect the scope of the claims. The amendments only further clarify the claimed invention.

Claims 15 and 16 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons set forth on page 3 of the Office Action.

In response, Applicant submits that claim 15 has been amended to delete the recitation of "preferably about 3 micrometers," and claim 16 has been amended to delete the recitation of "preferably up to about 5 wt. %, more preferably up to about 3 wt. %." Therefore, the claims particularly point out and distinctly claim the subject matter Applicant regards as the invention. Accordingly, it is respectfully requested that the Examiner withdraw the rejection of claims 15 and 16 under 35 U.S.C. § 112, second paragraph.

Claims 1, 4, 9, and 10 stand rejected under 35 U.S.C. § 102(b), as allegedly being unpatentable over U.S. Patent No. 6,316,535 to Caldwell et al. (Caldwell) for the reasons set forth on pages 3 and 4 of the Office Action.

In response, Applicants submit that the presently claimed invention is directed to a two-phase coating system. The presently claimed two-phase coating system comprises at least one catalyst, a liquid phase, and a separate dry sprinkleable powder phase. The liquid phase comprises one or more polymer binders cross-linkable by polar reaction. The separate dry sprinkleable powder phase comprises at least a part of the catalyst and/or of a precursor of the catalyst which forms the catalyst in reaction with a co-reactive compound in the liquid phase. The separate dry sprinkleable powder phase is formulated for sprinkling on a coating

of the liquid phase, after application of a coating of the liquid phase to a substrate. Therefore, the presently claimed two-phase coating system requires separate dry and liquid phases, where the dry phase is formulated for sprinkling on a coating of the liquid phase.

In contrast to the presently claimed two-phase coating system, Caldwell discloses an aqueous two-component system for coating a substrate. Each of the components is aqueous, and, thus, liquid. In particular, Caldwell, at column 4, lines 36 to 41, discloses:

In preparing the components of the present invention, the first component is prepared by simply mixing the filler, the first polymer, the catalyst (if present), and water. The second component is also prepared by simply mixing the filler, the second polymer, and water. Typically, the water comes from a calcium carbonate slurry.

As both of the components disclosed by Caldwell are aqueous, Caldwell does not disclose the presently claimed two-phase coating system, which comprises a liquid phase and a separate dry sprinkleable powder phase, where the dry phase is formulated for sprinkling on a coating of the liquid phase.

Therefore, as Caldwell does not disclose all of the elements of the presently claimed two-phase coating system, the present claims are not anticipated by that reference. Accordingly, it is respectfully requested that the Examiner withdraw the rejection of claims 1, 4, 9, and 10 under 35 U.S.C. § 102(b) over Caldwell.

Claims 1, 4, 9, 11, and 12 stand rejected under 35 U.S.C. § 102(b), as allegedly being unpatentable over U.S. Patent No. 6,669,835 to Honnick for the reasons set forth on pages 4 and 5 of the Office Action; and

Claim 16 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Honnick for the reasons set forth on page 8 of the Office Action.

In response, Applicant submits, as discussed above, that the presently claimed two-phase coating system requires separate dry and liquid phases, where the dry phase is formulated for sprinkling on a coating of the liquid phase.

In contrast to the presently claimed two-phase coating system, Honnick discloses a water incompatible catalyst that is adsorbed onto a water dispersible inorganic particulate carrier for use in aqueous systems, and stable aqueous dispersions containing ingredients comprising polymerizable reactants and the water incompatible catalyst, adsorbed onto the water dispersible inorganic, for the polymerization reaction. *See* Honnick, column 4, lines 3 to 9. The catalysts are used in aqueous matrix systems, and promote the cure of polymers from reactants dispersed in the matrix, where the aqueous matrix is a mixture in which water

is the major component, and contains other active ingredients that are dispersed, emulsified, and/or dissolved in the aqueous matrix to form a waterborne composition containing the active ingredients. *See* Honnick, column 4, line 25 to 43.

Therefore, Honnick does not disclose or suggest or provide any reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system, comprising separate dry and liquid phases, where the dry phase is formulated for sprinkling on a coating of the liquid phase, and, thus, the present claims are not anticipated by or obvious over that reference. Accordingly, it is respectfully requested that the Examiner withdraw the rejection of claims 1, 4, 9, 11, and 12 under 35 U.S.C. § 102(b) and the rejection of claim 16 under 35 U.S.C. §103(a) over Honnick.

Claims 1 to 3 and 7 stand rejected under 35 U.S.C. § 102(b), as allegedly being unpatentable over U.S. Patent No. 5,084,535 to Brindopke et al. (Brindopke), for the reasons set forth on page 5 of the Office Action.

In response, Applicant submits, as discussed above, that the presently claimed two-phase coating system requires separate dry and liquid phases, where the dry phase is formulated for sprinkling on a coating of the liquid phase.

In contrast to the presently claimed two-phase coating system, Brindopke is cited in the Office Action for disclosing a lacquer, comprising components A and B, which undergo a polar Michael reaction, where Component A may comprise trimethylolpropane trisacrylate, an electron deficient olefin, the lacquer may comprise a catalyst such as DABCO or triphenylphosphane and the triphenylphosphane will undergo a reaction with the electron deficient olefin to form a Lewis base. The Office Action also states that the catalyst is a separate phase, regardless of whether it is dispersed in a liquid system, the catalyst is capable of being sprinkled, and, as the claim is drawn to a composition, the catalyst must at some point be present in the liquid phase.

However, Brindopke does not disclose the presently claimed two-phase coating system, comprising separate dry and liquid phases, where the dry phase is formulated for sprinkling on a coating of the liquid phase, and, thus, the present claims are not anticipated by that reference. Accordingly, it is respectfully requested that the Examiner withdraw the rejection of claims 1 to 3 and 7 under 35 U.S.C. § 102(b) over Brindopke.

Claims 11 to 13 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Caldwell in view of U.S. Patent Application Publication No. 2002/0161135 to Berg et al. (Berg), for the reasons set forth on pages 5 and 6 of the Office Action.

In response, for the reasons set forth above, Applicant submits that Caldwell does not disclose or suggest the presently claimed two-phase coating system, which comprises a liquid phase and a separate dry sprinkleable powder phase, where the dry phase is formulated for sprinkling on a coating of the liquid phase, and provides no reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system. As stated in the Office Action, Caldwell does not disclose or suggest a powder having one or more activating compounds adsorbed to its surface.

Berg does nothing to overcome the deficiencies of Caldwell. As cited in the Office Action, Berg discloses a zirconia treated titanium, Tioxide TR92, in a coating composition. Even if one of ordinary skill in the art combined the disclosures of Caldwell and Berg, the resulting combination would not provide the presently claimed two-phase coating system. Instead the resulting combination would be an aqueous system, as disclosed by Caldwell, containing the Tioxide TR92 disclosed by Berg. That is not the present invention, and Caldwell and Berg, whether taken alone or in combination, do not provide any reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system.

Therefore, as Caldwell and Berg, whether taken alone or in combination, do not disclose or suggest or provide any reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system, the present claims are not obvious over those references. Accordingly, it is respectfully requested that the Examiner withdraw the rejection of claims 11 to 13 under 35 U.S.C. § 103(a) over Caldwell and Berg.

Claims 14 and 15 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Honnick and U.S. Patent No. 5,039,718 to Ashley et al. (Ashley), for the reasons set forth on pages 6 and 7 of the Office Action.

In response, for the reasons set forth above, Applicant submits that Honnick does not disclose or suggest the presently claimed two-phase coating system, which comprises a liquid phase and a separate dry sprinkleable powder phase, where the dry phase is formulated for sprinkling on a coating of the liquid phase, and provides no reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system. As stated in the Office Action Honnick does not disclose or suggest the size of the sand recited in the present claims.

Ashley does nothing to overcome the deficiencies of Honnick. As cited in the Office Action, Ashley discloses silica fillers, where the particles may be a mixture of two or more sets of particles with two widely differing mean particle sizes, such that particles of one or more sets can fit into the interstices of those of the others within the matrix. In particular,

Ashley discloses a cohesive polymer matrix, comprising a matrix polymer and a coated particulate filler dispersed in the matrix (Abstract).

Even if one of ordinary skill in the art combined the disclosures of Honnick and Ashley, the resulting combination would not provide the presently claimed two-phase coating system. Instead, the resulting combination would be an aqueous matrix system, as disclosed by Honnick, containing the filler disclosed by Ashley. That is not the present invention, and Honnick and Ashley, whether taken alone or in combination, do not provide any reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system.

Therefore, as Honnick and Ashley, whether taken alone or in combination, do not disclose or suggest or provide any reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system, the present claims are not obvious over those references. Accordingly, it is respectfully requested that the Examiner withdraw the rejection of claims 14 and 15 under 35 U.S.C. § 103(a) over Honnick and Ashley.

Claim 8 stands rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Honnick in view of Caldwell.

In response, for the reasons set forth above, Applicant submits that Honnick does not disclose or suggest the presently claimed two-phase coating system, which comprises a liquid phase and a separate dry sprinkleable powder phase, where the dry phase is formulated for sprinkling on a coating of the liquid phase, and provides no reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system. As stated in the Office Action Honnick does not disclose or suggest the powder phase comprising one or more amines.

Caldwell does nothing to overcome the deficiencies of Honnick. As discussed above, Caldwell discloses an aqueous two-component system for coating a substrate. Even if one of ordinary skill in the art combined the disclosure of Honnick and Caldwell, the resulting combination would not provide the presently claimed two-phase coating system. Instead, the combination would provide an aqueous matrix system. That is not the presently claimed two-phase coating system.

Therefore, Honnick and Caldwell, whether taken alone or in combination, provide no reason for one of ordinary skill in the art to obtain the presently claimed two-phase coating system, and, thus, the present claims are not obvious over those references. Accordingly, it is respectfully requested that the Examiner withdraw the rejection of claim 8 under 35 U.S.C. §103(a) over Honnick and Caldwell.

Applicants thus submit that the entire application is now in condition for allowance, an early notice of which would be appreciated. Should the Examiner not agree with Applicants' position, a personal or telephonic interview is respectfully requested to discuss any remaining issues prior to the issuance of a further Office Action, and to expedite the allowance of the application.

No fee is believed to be due for the filing of this Amendment. Should any fees be due, however, please charge such fees to Deposit Account No. 11-0600.

Respectfully submitted,

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Dated: July 24, 2009

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